

melting **a part of the crystalline fraction (F)** by raising the temperature so that G2U is melted while the glycerides having a higher melting point than G2U are not melted ...”

The Examiner admits that the claims differ from the references in the recitation of a heating step. Although the Examiner makes the assertion that a “heating step” must be involved since the fat is melted, the Examiner fails to even mention the **partial melting step** required by Applicants’ claimed method. Such a method is clearly not described or suggested by the cited references.

Further, although the presently claimed method and the method of the prior art both describe a heating step, these methods are clearly different since one requires **complete melting** by heat (the prior art), and the other requires **partial melting** by temperature raising (the presently claimed method). The temperature rising step of the presently claimed invention enables the fractionation of an interesterified fat or an isomerization hydrogenated fat, which has various molecular species of fatty acids, into G2U fat with high concentration, without using a solvent. Please see the Attached Sheet. (Applicants note that the interesterified fat and isomerization hydrogenated fats are different from simple palm oil.)

Furthermore, on page 3, lines 14-16 of the Office Action, the Examiner states, “The fact that a fat is chemically altered in some way is not seen to materially impact a process that separates a fat according to its melting point.” Applicants respectfully disagree with this assertion.

Fats are composed of complicated components which are not able to be classified **only** by the melting point. In fact, Tirtiaux discloses that “The feedstock is complex, even the most simple fat containing over a hundred different types of molecule in addition to the triglycerides of which it is mainly constituted.” Please see page 17, center column, lines 15-20 of Tirtiaux. Even a simple fat is composed of complicated components. In the case of a more complicated fat, such as an interesterified fat or an isomerization hydrogenated fat, the dry fractionation is incomparably more difficult than the case of palm oil. This is because the more complicated composition of the interesterified fat or isomerization hydrogenated fat makes a material impact on the fractionation.

The Examiner also states, “Palm oil is not seen to be a vegetable butter.” Please see page 3, last line of the Office Action. Contrary to this unsupported assertion of the Examiner,

Applicants' specification clearly describes that "Examples of the vegetable butter includes vegetable fats such as palm oil..." Please see page 8, lines 13-14 of Applicants' specification.

Furthermore, on page 4, lines 9-13 of the Office Action, the Examiner states, "The fact that one does not usually use the process on alternative fats is not a good indication of patentable subject matter. The fact that solvents are usually used in fat fractionation does not suggest that dry fractionation is a new [and] [un]obvious process for fat fractionation, particularly in view of the applied references." Applicants respectfully disagree with this assertion.

Those of ordinary skill in the art have not employed the dry fractionation for fractionating interesterified fats and isomerization hydrogenated fats, because with dry fractionation, the fractionation performance is too inferior to the solvent fractionation when these fats are fractionated. The presently claimed invention solves this problem, and enables fractionation of more complicated fats, such as interesterified fats and isomerization hydrogenated fats, with good fractionation performance by use of dry fractionation. The presently claimed method is neither taught nor suggested by the cited references.

Accordingly, it is respectfully requested that the rejection be withdrawn.

Conclusion

Therefore, in view of the above remarks, it is submitted that the ground of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

If, after reviewing this response, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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ATTACHMENT TO RESPONSE

Deffense ,Tirtiaux

Claim16

